

Remarks

Claims 1-13 are presently pending in this application. Claim 4 has been amended. New claim 14 has been added.

Rejections Under 35 U.S.C. § 102

Claims 1-4 and 13 are rejected under 35 U.S.C. § 102(b) as being anticipated by Tuohey, claims 1-4, 6 and 13 are rejected under 35 U.S.C. § 102(b) as being anticipated by Vanesky ('577) and claims 1-7 and 13 are rejected under 35 U.S.C. § 102(b) as being anticipated by Shaefer. Applicant respectfully traverses each of these rejections.

As amended herein, all of the claims are now limited to DWV fittings and systems. Neither Tuohey, Vanesky ('577) or Shaefer disclose or in any way teach the use of DWV fittings and systems. The term "DWV" is a term of art in the industry and a defined term in this application. The term is defined on page 2 of the originally-filed specification:

DWV fittings are generally of the type having sweeping full bore solids handling design and fall. "Fall" as that term is used in drain systems means to move the material and keep the pipe from filling with solids. Typical fall is about 1/4" per foot, meaning every foot of pipe is 1/4" lower than the last. This fall is typically built into the

fittings. For example, in the case of a sanitary tee branch, the sanitary tee branch isn't exactly 90 degrees, so that when pipe is attached to it, the tee branch approaches at a slope of about 1/4" per foot.

That the term "DWV" is a recognized term of art in the industry can be seen from the cited reference of Condon et al. Therein, the term "DWV" is repeatedly used without any definition or explanation. Thus, clearly Condon et al. treats the term "DWV" as a term of art known to those of ordinary skill in the art. To further underscore this point, applicant attaches as Exhibit A a true and correct copy of ASTM Standard D 3311-94 entitled "Standard Specification for Drain, Waste and Vent (DWV) Plastic Fittings Patterns." This standard illustrates the fact that "DWV" is a recognized term of art in the industry.

Tuohey discloses the use of ordinary pressure fittings having sharp 90° bends. None of the fittings taught or disclosed by Tuohey have full sweeping bores, and none have fall. Clearly, Tuohey does not disclose or teach the use of DWV fittings.

Similarly, Vanesky ('577) does not disclose or teach DWV fittings. Nothing in Vanesky ('577) discloses fittings having fall.

Shaefer, like Tuohey and Vanesky ('577), does not disclose or teach DWV fittings. The fittings disclosed and

taught in Shaefer are ordinary pressure fittings having sharp 90° bends and no fall.

Since each of the claims is limited to DWV fittings and systems, and since neither Tuohey, Vanesky('577) or Shaefer discloses or teaches the use of DWV fittings or systems, the rejections under 35 U.S.C. § 102 of claims 1-4 and 13 as being anticipated by Tuohey, the rejections of claims 1-4, 6 and 13 as being anticipated by Vanesky ('577) and the rejections of claims 1-7 and 13 as being anticipated by Shaefer are inappropriate and should be withdrawn.

#### **Rejections Under 35 U.S.C. § 103**

Claims 10-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Condon in view of Shaefer. Claims 8-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shaefer. Applicant respectfully traverses these rejections.

Condon merely recites DWV pipe and fittings. Condon teaches the use of TVC and ABS as materials for the construction of such DWV pipe and fittings. Nowhere in Condon is there taught or fairly suggested the use of CPVC pipe and fittings. Shaefer discloses fittings made from CPVC, but nowhere in Shaefer is there taught or fairly suggested the use of CPVC for DWV fittings. As explained in the Declaration of Gregory peak, filed concurrently herewith, those of ordinary skill in the art believed CPVC to be unsuitable for DWV applications. This is because those of ordinary skill in the art believed that CPVC

pipe and fittings could not be adequately assembled so as to resist the corrosive atmospheres frequently found in DWV applications. For this reason, it would not have been obvious to those of ordinary skill in the art to have combined the teachings of Condon and Shaefer as suggested by the examiner. For this reason alone, the rejection of claims 10-13 over Condon in view of Shaefer is in error and should be withdrawn.

For similar reasons, the rejection of claims 8-12 over Shaefer is in error and should be withdrawn. As noted above, Shaefer discloses the use of CPVC fittings and pipe, but nowhere suggests their use in DWV service. Those of ordinary skill in the art would not have extrapolated the teachings of Shaefer to employ CPVC pipe for DWV service because, as set forth in the Declaration of Gregory Peak, those of ordinary skill in the art believed that CPVC fittings and pipe were unsuitable for use in DWV service.

Moreover, all of the rejections under 35 U.S.C. § 103 should be withdrawn for a second reason. That reason centers on the extraordinary commercial success of DWV pipe and fittings made from CPVC. The sale of DWV pipe and fittings made from CPVC debuted in the marketplace at a whopping three times of the initial sales figures of a parallel new product. After its magnificent initial year, sales in the second year of DWV pipe and fittings made from CPVC rose an overwhelming 430%. In the third year, sales rose again by 80%. As explained by Mr. peak, this tremendous commercial success was due solely to the CPVC material content of the fittings and pipe together with its

associated advantages. Since DWV fittings made from CPVC are typically only sold with pipe made from CPVC, the commercial success of DWV fittings and pipe made from CPVC is equally applicable to those claims directed only to DWV fittings made from CPVC.

The overwhelming commercial success of DWV fittings and pipe made from CPVC provide a second reason why claims 8-12 and 10-13 were not obvious to those of ordinary skill in the art at the time the invention was made, and underscore applicant's position that the rejections of claims 8-12 and 10-13 under 35 U.S.C. § 103 should be withdrawn.

#### **New Claim 14**

New claim 14 claims a system comprising DWV pipe and fittings made from CPVC. No new matter has been added by this new claim. For the reasons expressed above on behalf of the patentability of claims 1-13, claim 14 is also believed patentable.

#### **Conclusion**

The Applicant believes that all pending claims are now believed to be in condition for allowance and a Notice of Allowance is requested. If, however, there remain any issues which can be addressed by telephone, the Examiner is encouraged to contact the undersigned at the telephone number listed below.

Applicant requests a three-month extension of time in which to respond to the pending office action. Applicant also grants the Commissioner authorization to charge the fee for said three-month extension in the amount of \$1,020, as well as any additional fees associated with the filing of this document, to Deposit Account No. 19-2090.

Respectfully submitted,

SHELDON & MAK

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I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class Mail in an envelope addressed to: MAIL STOP RESPONSE, COMMISSIONER FOR PATENTS, P.O. Box 1450, Alexandria, VA 22313-1450, on January 28, 2005, at Pasadena, California.

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